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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,868	11/20/2003	Hyun-kwon Chung	1293.1970.	5648
49455 7590 01/25/2008 STEIN, MCEWEN & BUI, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			EXAMINER PATEL, MANGLES M	
			ART UNIT 2178	PAPER NUMBER
			MAIL DATE 01/25/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/716,868

Applicant(s)

CHUNG ET AL.

Examiner

Manglesh M. Patel

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10/31/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/1/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION/**

1. This Non-Final action is responsive to the RCE filed on 10/31/2007 and the IDS filed 11/1/2007.
2. In the RCE Claims 1-21 are pending. Claims 22-25 are canceled. Claims 1, 9, 15 and 19 are the independent claims.

**Withdrawn Rejections**

3. The 35 U.S.C. 103(a) rejections of claims 1-21 with cited references of Echo (NPL, FLASH VS JAVA APPLET(S) in view of Moock (NPL, The Art of Flash 5 Preloading) Further in view of Chun (NPL, Flash 5 Advanced for Windows and Macintosh: Visual QuickPro Guide) has been withdrawn in light of the amendment.

**Information Disclosure Statement**

4. The information disclosure statement (IDS) submitted on 11/1/2007 has been entered, and considered by the examiner.

**Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pumaveja (U.S. 6,006,241, filed on Mar. 14, 1997) in view of Sani (NPL—Java Applets #4, April 1998, irt.org, pgs 1-6).

**Regarding Independent claim 1,** A method of displaying a markup document and a linked applet within the markup document, the method comprising: Delaying display of image output information for the markup document using image output delay information used to delay display of the markup document, and included in the applet or the markup document; and Synchronizing the delayed image output information for the markup document with applet output information for the applet linked to the markup document, when rendering of the applet is completed, such that the delayed image output information for the markup document and the applet output information for the applet are displayed simultaneously, wherein the applet is formed using the Java programming language.

Purnaveja teaches the synchronized display of textual/graphical HTML data with Java applets (see abstract & column 2, lines 40-55). He teaches the delay of markup image/audio data by using a decoder which buffers the markup data (see fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58). He states that "Further, since the video and annotation streams are handled synchronously but separately by video decoder 964 and annotation interpreter 963, respectively, steps 1040 and 1050 can occur concurrently..."(see column 9, lines 34-40). Although Purnaveja provides a reasonable suggestion for simultaneous display of HTML data with applets he fails to teach the use of delay functions within the applet for delaying applet data, instead relying on the interpreter/decoder to display both data concurrently further using time markers to display data at a predetermined time, thus including attributes to delay markup data display. Sani teaches the use of common Java Applet functions that include delay/suspending of applet data (see pg 2, paragraphs 1 & 3 & pg 3, paragraphs 1-2 & pg 4, paragraphs 1-2). He also describes the common applet execution states for start, stop and destroy operations using functions (see pg 2, paragraphs 1 & 3). At the time of the invention it would have been obvious for the skilled artisan to have implemented the common delay/suspend Java applet functions of Sani with the invention of Purnaveja. The motivation for doing so would have been to continuously display HTML and applet data concurrently thereby providing information in an integrated seamless package to client computers.

**Regarding Dependent claim 2**, with dependency of claim 1, Purnaveja teaches wherein the delaying of the display of the image output information for the markup document comprises buffering the image output information for the markup document (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Dependent claim 3**, with dependency of claim 1, Purnaveja teaches wherein the synchronously displaying the delayed image output information for the markup document and the applet output for an initial image of the applet comprises simultaneously providing the delayed image output information for the markup document and the applet output for the initial image of the applet to a display device based on an output control signal (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Dependent claim 4**, with dependency of claim 1, Purnaveja teaches wherein the applet is formed of program codes having an output method different from that of the markup document (see abstract & column 2, lines

40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Dependent claim 5**, with dependency of claim 3, Purnaveja teaches wherein the output control signal is provided from an applet executing engine, which interprets the applet, or a presentation engine, which interprets the markup document (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Dependent claim 6**, with dependency of claim 1, Purnaveja teaches wherein the delaying of the display of the image output information for the markup document comprises buffering text output of the markup document and buffering at least one of an image output and an audio output of the markup document (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Dependent claim 7**, with dependency of claim 2, Purnaveja teaches wherein the buffering comprises buffering text output of the markup document and buffering at least one of an image output and an audio output of the markup document (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Dependent claim 8**, with dependency of claim 3, Purnaveja teaches wherein the delaying of the display of the image output information for the markup document comprises buffering text output of the markup document and buffering at least one of an image output and an audio output of the markup document (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Independent claim 9**, An information storage medium controlling a computer to display a markup document and a linked applet within the markup document, comprising: the markup document; and the applet linked to the markup document, wherein the applet or the markup document includes markup image output delay information used to delay display of the markup document such that image output information of the markup document and applet

output information of the applet are synchronized to be displayed simultaneously, wherein the applet is formed using the Java programming language.

Purnaveja teaches the synchronized display of textual/graphical HTML data with Java applets (see abstract & column 2, lines 40-55). He teaches the delay of markup image/audio data by using a decoder which buffers the markup data (see fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58). He states that "Further, since the video and annotation streams are handled synchronously but separately by video decoder 964 and annotation interpreter 963, respectively, steps 1040 and 1050 can occur concurrently..."(see column 9, lines 34-40). Although Purnaveja provides a reasonable suggestion for simultaneous display of HTML data with applets he fails to teach the use of delay functions within the applet for delaying applet data, instead relying on the interpreter/decoder to display both data concurrently further using time markers to display data at a predetermined time, thus including attributes to delay markup data display. Sani teaches the use of common Java Applet functions that include delay/suspending of applet data (see pg 2, paragraphs 1 & 3 & pg 3, paragraphs 1-2 & pg 4, paragraphs 1-2). He also describes the common applet execution states for start, stop and destroy operations using functions (see pg 2, paragraphs 1 & 3). At the time of the invention it would have been obvious for the skilled artisan to have implemented the common delay/suspend Java applet functions of Sani with the invention of Purnaveja. The motivation for doing so would have been to continuously display HTML and applet data concurrently thereby providing information in an integrated seamless package to client computers.

**Regarding Dependent claim 10**, with dependency of claim 9, Although Purnaveja provides a reasonable suggestion for simultaneous display of HTML data with applets he fails to teach the use of delay functions within the applet for delaying applet data, instead relying on the interpreter/decoder to display both data concurrently further using time markers to display data at a predetermined time, thus including attributes to delay markup data display. Sani teaches wherein the applet executes in any one state of an initial state, a start state, a stop state, and a destroy state (see pg 2, paragraphs 1 & 3 & pg 3, paragraphs 1-2 & pg 4, paragraphs 1-2, including the explanation provided in the Independent claims). At the time of the invention it would have been obvious for the skilled artisan to have implemented the common delay/suspend Java applet functions of Sani with the invention of Purnaveja. The motivation for doing so would have been to continuously display HTML and applet data concurrently thereby providing information in an integrated seamless package to client computers.

**Regarding Dependent claim 11**, with dependency of claim 9, Although Purnaveja provides a reasonable suggestion for simultaneous display of HTML data with applets he fails to teach the use of delay functions within the applet for delaying applet data, instead relying on the interpreter/decoder to display both data concurrently further using time markers to display data at a predetermined time, thus including attributes to delay markup data display. Sani teaches wherein the applet includes a delay function as the markup image output delay information for synchronizing display of image output information of the markup document with display of output information of the applet (see pg 2, paragraphs 1 & 3 & pg 3, paragraphs 1-2 & pg 4, paragraphs 1-2, including the explanation provided in the Independent claims). At the time of the invention it would have been obvious for the skilled artisan to have implemented the common delay/suspend Java applet functions of Sani with the invention of Purnaveja. The motivation for doing so would have been to continuously display HTML and applet data concurrently thereby providing information in an integrated seamless package to client computers.

**Regarding Dependent claim 12**, with dependency of claim 10, Although Purnaveja provides a reasonable suggestion for simultaneous display of HTML data with applets he fails to teach the use of delay functions within the applet for delaying applet data, instead relying on the interpreter/decoder to display both data concurrently further using time markers to display data at a predetermined time, thus including attributes to delay markup data display. Sani teaches wherein the applet includes a delay function during the start state as the markup image output delay information for synchronizing display of image output information of the markup document with display of output information of the applet (see pg 2, paragraphs 1 & 3 & pg 3, paragraphs 1-2 & pg 4, paragraphs 1-2, including the explanation provided in the Independent claims). At the time of the invention it would have been obvious for the skilled artisan to have implemented the common delay/suspend Java applet functions of Sani with the invention of Purnaveja. The motivation for doing so would have been to continuously display HTML and applet data concurrently thereby providing information in an integrated seamless package to client computers.

**Regarding Dependent claim 13**, with dependency of claim 10, Although Purnaveja provides a reasonable suggestion for simultaneous display of HTML data with applets he fails to teach the use of delay functions within the applet for delaying applet data, instead relying on the interpreter/decoder to display both data concurrently further using time markers to display data at a predetermined time, thus including attributes to delay markup data display. Sani teaches wherein the applet comprises: a delay function as the markup image output delay information, which delays display of

image output information for the markup document; and a delay cancel function canceling the delay of the display of the image output information for the markup document, when rendering of an initial image of the applet is completed by the initial and start states of the applet (see pg 2, paragraphs 1 & 3 & pg 3, paragraphs 1-2 & pg 4, paragraphs 1-2, including the explanation provided in the Independent claims). At the time of the invention it would have been obvious for the skilled artisan to have implemented the common delay/suspend Java applet functions of Sani with the invention of Purnaveja. The motivation for doing so would have been to continuously display HTML and applet data concurrently thereby providing information in an integrated seamless package to client computers.

**Regarding Dependent claim 14**, with dependency of claim 9, Purnaveja teaches wherein the markup document comprises tag or attribute indication information as the markup image output delay information to control synchronous display of output of the markup document with output of the applet (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Independent claim 15**, A computer system with a display device to display a markup document and a linked applet within the markup document, comprising: a presentation engine, which interprets the markup document to provide image output information for the markup document; and an applet executing engine, which interprets the applet linked to the markup document to provide an applet output, wherein the presentation engine delays display of the image output information for the markup document using image output delay information used to delay display of the markup document, and included in the applet or the markup document, and synchronizes and outputs the delayed image output information of the markup document and the applet output to the display device for simultaneous display, when an output control signal indicating completion of rendering of the applet output is input from the applet executing engine, and the applet is formed using the Java programming language.

Purnaveja teaches the synchronized display of textual/graphical HTML data with Java applets (see abstract & column 2, lines 40-55). He teaches the delay of markup image/audio data by using a decoder which buffers the markup data (see fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58). He states that "Further, since the video and annotation streams are handled synchronously but separately by video decoder 964 and annotation interpreter 963, respectively, steps 1040 and 1050 can occur concurrently..."(see column 9, lines 34-40). Although Purnaveja



provides a reasonable suggestion for simultaneous display of HTML data with applets he fails to teach the use of delay functions within the applet for delaying applet data, instead relying on the interpreter/decoder to display both data concurrently further using time markers to display data at a predetermined time, thus including attributes to delay markup data display. Sani teaches the use of common Java Applet functions that include delay/suspending of applet data (see pg 2, paragraphs 1 & 3 & pg 3, paragraphs 1-2 & pg 4, paragraphs 1-2). He also describes the common applet execution states for start, stop and destroy operations using functions (see pg 2, paragraphs 1 & 3). At the time of the invention it would have been obvious for the skilled artisan to have implemented the common delay/suspend Java applet functions of Sani with the invention of Purnaveja. The motivation for doing so would have been to continuously display HTML and applet data concurrently thereby providing information in an integrated seamless package to client computers.

**Regarding Dependent claim 16**, with dependency of claim 15, Purnaveja teaches wherein the presentation engine comprises a buffer to buffer the image output information of the markup document to delay the display of the image output information for the markup document, in response to the image output delay signal input from the applet executing engine (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Dependent claim 17**, with dependency of claim 15, Purnaveja teaches wherein the presentation engine comprises an audio buffer, which buffers audio output, and a video buffer, which buffers video output, of the image output information of the markup document and/or of the applet output to delay the display of the image output information for the markup document, in response to the output control signal input from the applet executing engine (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Dependent claim 18**, with dependency of claim 16, Purnaveja teaches wherein the image output delay signal is set according to an amount of rendering time of the markup document and/or the applet (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

**Regarding Independent claim 19,** A computer with a display device to display a markup document image and a linked applet image within the markup document image, comprising: a programmed computer processor to control synchronous output of the markup document image including a linked applet image to the display device, according to display control information in the markup document image and/or in the linked applet image, so that the markup document image and the linked applet image are displayed simultaneously as a markup image, wherein the applet is formed using the Java programming language.

Purnaveja teaches the synchronized display of textual/graphical HTML data with Java applets (see abstract & column 2, lines 40-55). He teaches the delay of markup image/audio data by using a decoder which buffers the markup data (see fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58). He states that "Further, since the video and annotation streams are handled synchronously but separately by video decoder 964 and annotation interpreter 963, respectively, steps 1040 and 1050 can occur concurrently..."(see column 9, lines 34-40). Although Purnaveja provides a reasonable suggestion for simultaneous display of HTML data with applets he fails to teach the use of delay functions within the applet for delaying applet data, instead relying on the interpreter/decoder to display both data concurrently further using time markers to display data at a predetermined time, thus including attributes to delay markup data display. Sani teaches the use of common Java Applet functions that include delay/suspending of applet data (see pg 2, paragraphs 1 & 3 & pg 3, paragraphs 1-2 & pg 4, paragraphs 1-2). He also describes the common applet execution states for start, stop and destroy operations using functions (see pg 2, paragraphs 1 & 3). At the time of the invention it would have been obvious for the skilled artisan to have implemented the common delay/suspend Java applet functions of Sani with the invention of Purnaveja. The motivation for doing so would have been to continuously display HTML and applet data concurrently thereby providing information in an integrated seamless package to client computers.

**Regarding Dependent claim 20,** with dependency of claim 19, Purnaveja teaches wherein the programmed computer processor controls an order of rendering of the markup document image and the linked applet image according to the display control information to synchronously and simultaneously display the markup document image and the linked applet image as the markup image (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

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Regarding Dependent claim 21, with dependency of claim 19, Purnaveja teaches wherein the display control information is used to suspend an output for display of the markup document image until the markup document image and the linked applet image are simultaneously displayable as the markup image (see abstract & column 2, lines 40-55 & fig 9 numerals 966-965 & column 9, lines 5-65, specifically lines 34-58, including the explanation provided in the independent claims).

*It is noted that any citation `[[s]]` to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. `[[See, MPEP 2123]]`*

#### Response to Arguments

7. Applicant's arguments filed 10/31/2007 have been considered but are moot in view of the new grounds of rejections.

#### Conclusion

#### References Cited

8. The art. made of record and not relied upon is considered pertinent to applicant's disclosure.
- Mikhail et al. (U.S. 7,246,324) discloses "Method And System For Data Capture With Hidden Applets"
  - Himmel et al. (U.S. 6,317,782) discloses "Method And Apparatus For Detecting Actual Viewing Of Electronic Advertisements And Transmitting The Detected Information"
  - Zerber (U.S. 6,175,877) discloses "Inter-Applet Communication Within A Web Browser"
  - Pedro (U.S. Pub 2002/0091732) discloses "Displaying Forms And Content In A Browser"
  - Jones, Anatomy of a Java Applet: Part 1 & 2 & 3, Aug 1996-1997, Novell, pgs 1-53
  - Kalla, Gosling on Applet load time: "get over it" (forum posts), Javalobby, pgs 1-4
  - Patrick Niemeyer & Joshua Peck, Exploring Java, 2nd Edition July 1997, section 6.2, pgs 1-4
  - Java Sun, How to Use Swing Timers, Oct 1, 2002, Sun, pgs 1-14

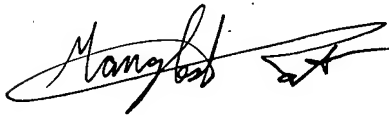
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manglesh M. Patel whose telephone number is (571) 272-5937. The examiner can normally be reached on M,F 8:30-6:00 T,TH 8:30-3:00 Wed 8:30-7:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached on (571)272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manglesh M. Patel  
Patent Examiner  
January 18, 2008



STEPHEN HONG  
SUPERVISORY PATENT EXAMINER